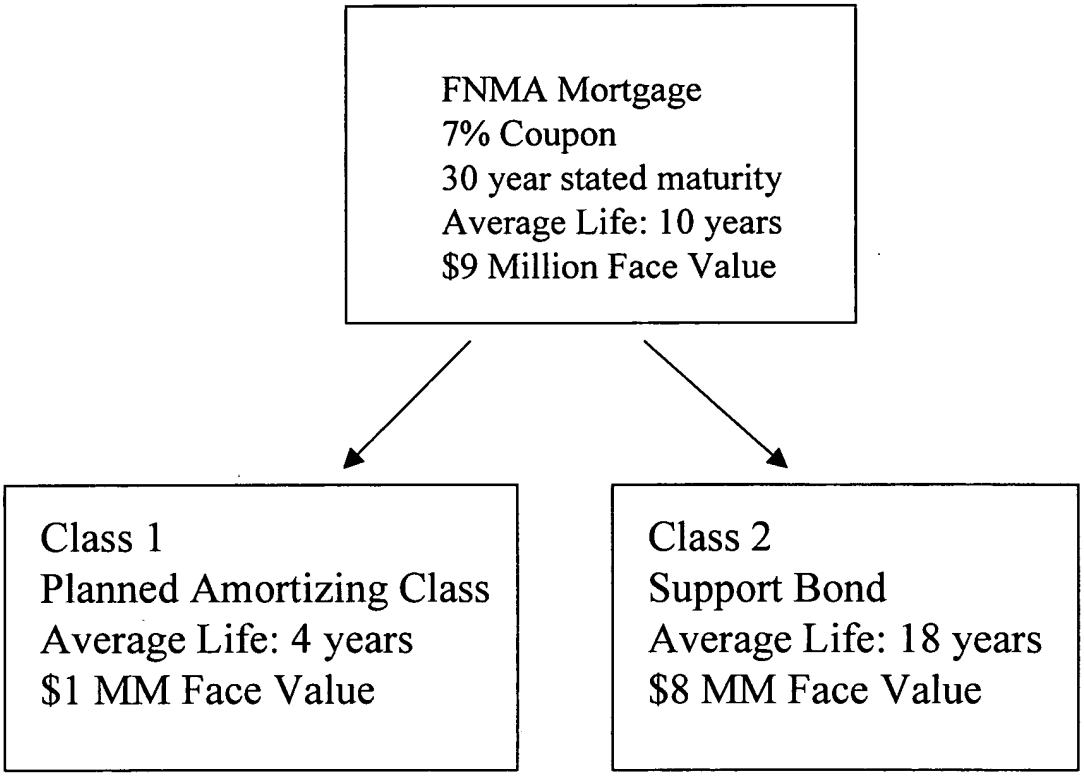
FNMA Mortgage
7% Coupon
30 year stated maturity
Average Life: 10 years
$9 Million Face Value
Class 1
Planned Amortizing Class
Average Life: 4 years
$1 MM Face Value
Class 2
Support Bond
Average Life: 18 years
$8 MM Face Value

Figure 1

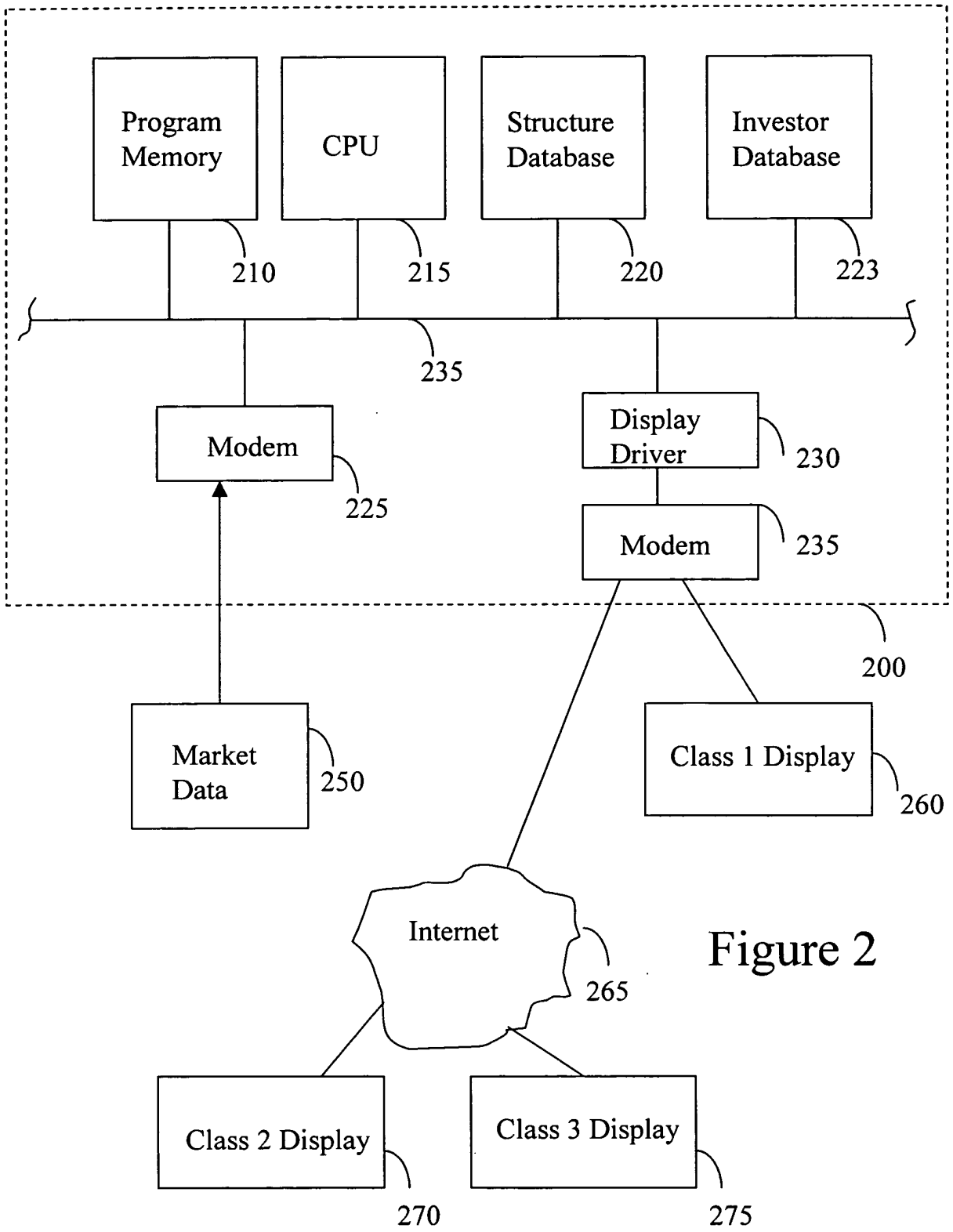
Program Memory
CPU
Structure Database
Investor Database
210
215
220
223
235
Modem
225
Display Driver
230
Modem
235
200
Market Data
250
Class 1 Display
260
Internet
265
Class 2 Display
270
Class 3 Display
275

Figure 2

Class 1 Display

Planned Amortizing Class
Underlying Security: FNMA 7% Pool ID: 400210
Coupon: 6.25%
Face: $1MM
Payment Frequency: Semi-annual
Average Life: 4 years
PAC Band 200 PSA - 400 PSA

	Your Bid	Market
Bid Amount:		$1MM
Bid Price:	____ %	99.25%

COMMIT

Figure 3A

Class 2 Display

Support Bond
Underlying FNMA 7% Pool ID: 400210
Minimum Coupon: 7.0%
Face Amount: $8MM
Average Life: 18 years
Payment Frequency: Semi-annual
Avg Life at 100 PSA: 20 Years
Avg Life at 500 PSA: 1 Year

	Your Bid	Market
Bid Amount:		$12MM
Bid Price:	____ %	100%

COMMIT

Figure 3B

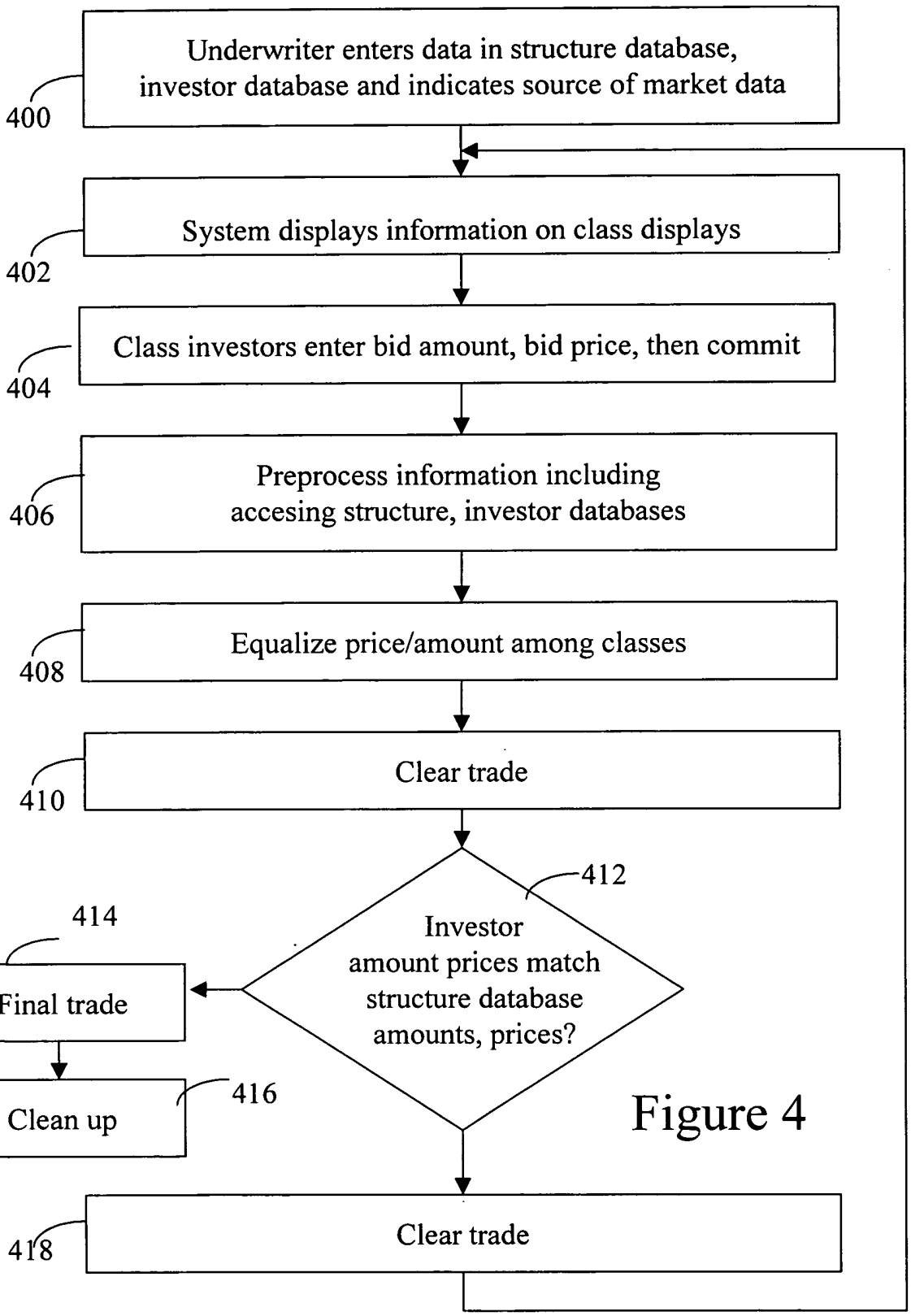
Underwriter enters data in structure database, investor database and indicates source of market data
400
System displays information on class displays
402
Class investors enter bid amount, bid price, then commit
404
Preprocess information including accesing structure, investor databases
406
Equalize price/amount among classes
408
Clear trade
410
412
Investor amount prices match structure database amounts, prices?
414
Final trade
Clean up
416
Clear trade
418

Figure 4

Class 1 Display

5 Year Prepayment Floor
Reference Security: FNMA 7% Pool ID: 400210
Credit: U.S. Treasury
Strike Rate: 270%
Coupon: 10%
Notional: $4MM
Payment Frequency: Semi-annual

	Your Bid	Market
Bid Amount:		$16MM
Bid Price:	____ %	7.50%

COMMIT

Figure 6A

Class 2 Display

5 Year Fixed Maturity Mortgage
Reference Security: FNMA 7% Pool ID: 400210
Credit: U.S. Treasury
Initial Coupon: 7.00%
Alternative Coupon: 3.67%
Trigger PSA: 270% PSA
Face Amount: $12MM
Payment Frequency: Semi-annual

	Your Bid	Market
Bid Amount:		$12MM
Bid Price:	____ %	100%

COMMIT

Figure 6B

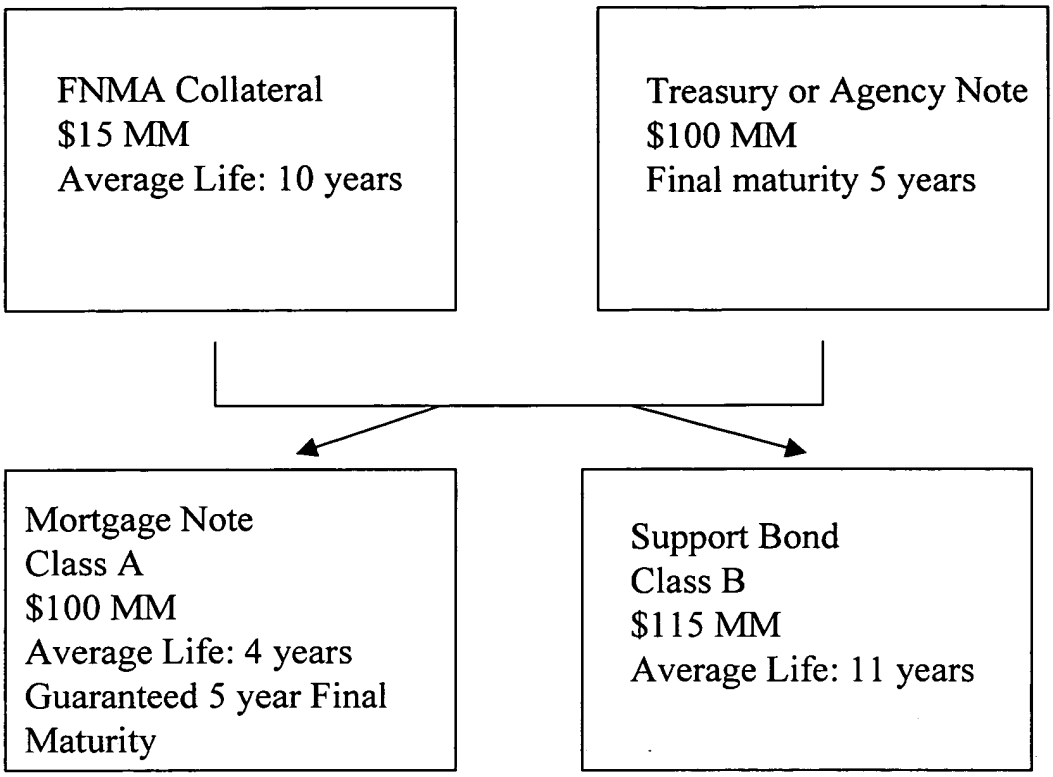
FNMA Collateral
$15 MM
Average Life: 10 years
Treasury or Agency Note
$100 MM
Final maturity 5 years
Mortgage Note
Class A
$100 MM
Average Life: 4 years
Guaranteed 5 year Final
Maturity
Support Bond
Class B
$115 MM
Average Life: 11 years

Figure 5

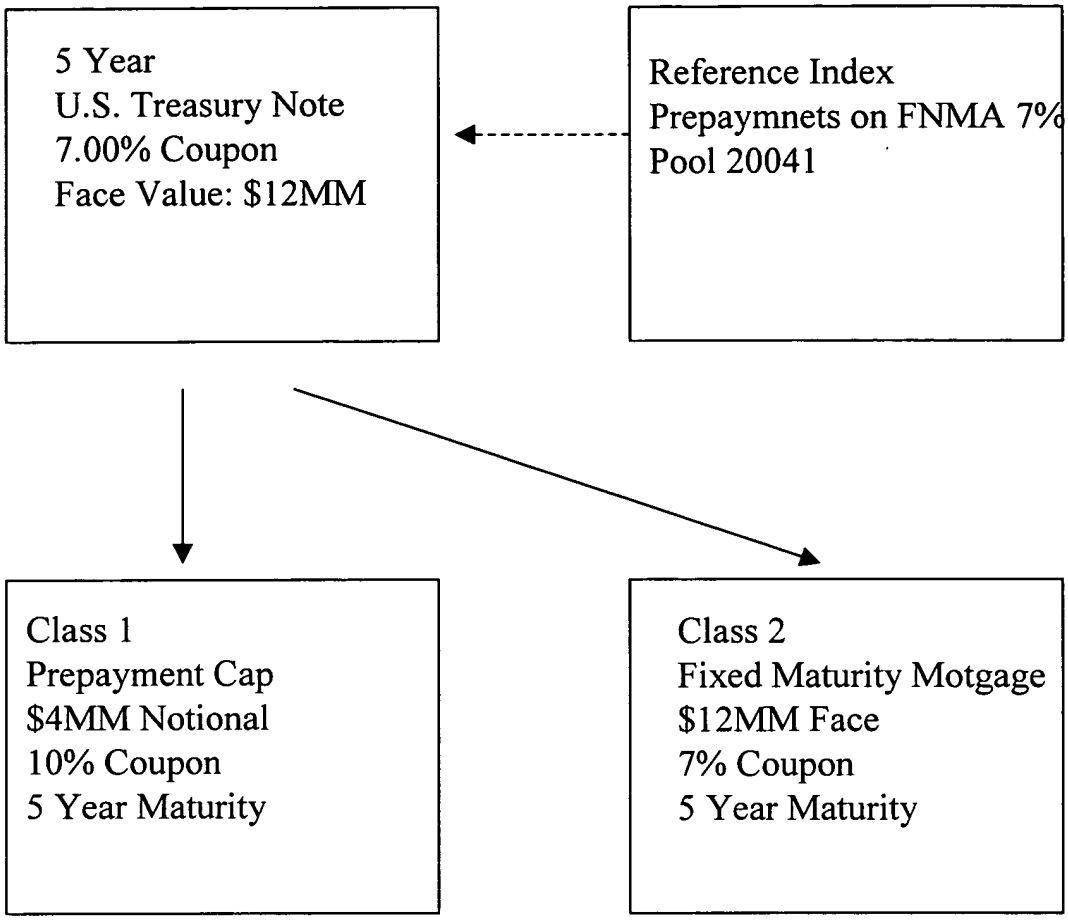
5 Year
U.S. Treasury Note
7.00% Coupon
Face Value: $12MM
Reference Index
Prepaymnets on FNMA 7%
Pool 20041
Class 1
Prepayment Cap
$4MM Notional
10% Coupon
5 Year Maturity
Class 2
Fixed Maturity Motgage
$12MM Face
7% Coupon
5 Year Maturity

Figure 7

Prepayment Cap Database Table Structure

Field Name	Field Type	Description
InstId	Integer	Instrument Id of this cap
BidPrice	Double	Price buyer is wiling to pay for cap
BidUserId	Integer	Membership Id of Person Buying Prepayment Cap
BidTime	Time	Time Price for Prepayment Cap was Entered
BidValidTime	Time	Time when Bid Price expires
BidCancelTime	Time	Time When Bid Price as canceled
CollateralType	String	String indicating collateral code: GNMA,FNMA,FHLMC,WholeLoan
WAC	Double	Weighted Average Coupon of Collateral
WAM	Double	Weighted Average Maturity of Collateral (in months)
PoolId	Long Integer	Id of Pool in Mortgage Ref Database
PSA Strike Rate	Double	Minimum PSA Rate at which Payment Occurs
Max Payment	Double	Max Payment Amount
Payment Style	Text	Constant,Normal,Formula
Payment Freq	Text	Payment Frequency (Monthly,Quarterly,SemiAnnual,Annual)
Maturity	Double	When cap expires
AskUserId	Time	Membership Id of Person Buying Final Maturity Mortgage Note
AskPrice	Double	Price Member is willing to pay for Final Maturity Mortgage Note
AskTime	Time	Time Price for Final Maturity Mortgage Note was entered
AskValidTime	Time	Time When AskPrice prices
AskCancelTime	Time	Time When Ask Price was canceled
AskInstId	Long Integer	Id of Final Maturity Mortgage Note

Figure 8A

Prepayment Cap Sample Transaction Layout

Field Name	Sample Values
InstId	24001
BidPrice	$1,000,000
BidUserId	22
BidTime	01/24/2000 11:15:22 CST
BidValidTime	01/24/2000 12:30:00 CST
BidCancelTime	NULL
CollateralType	FNMA
WAC	7.50%
WAM	350
PoolId	NULL
PSA Strike Rate	270%
Max Payment	500,000
Payment Style	Formula
Payment Freq	QTR
Maturity	1/24/05
AskUserId	67
AskPrice	$1,200,000
AskTime	01/24/2000 12:01:04 CST
AskValidTime	01/24/2000 13:00:00 CST
AskCancelTime	NULL
AskInstId	24111

Figure 8B

Prepayment Cap Payout Structure

Field Name	Field Type	Description
InstId	Integer	Instrument Id of this cap
PSAId	Double	PSA Identifier
PSAAmt	Double	Percent of MaxAmount Paid at this PSA

Prepayment Cap Sample Payout Layout

Field Name	Field Type
InstId	24001
PSAId	270
PSAAmt	10%
InstId	24001
PSAId	300
PSAAmt	25%
InstId	24001
PSAId	350
PSAAmt	35%
InstId	24001
PSAId	400
PSAAmt	40%
InstId	24001
PSAId	500
PSAAmt	100%
InstId	24001
PSAId	2000
PSAAmt	100%

Figure 8C

Final Maturity Mortgage Table Structure

Field Name	Field Type	Description
InstId	Integer	Instrument Id of this Final Maturity Mortgage
BidPrice	Double	Price Member is willing to pay for Final Maturity Mortgage Note
BidUserId	Integer	Membership of Id of Member buying FMMN
BidTime	Time	Time Price for FMMN was entered
BidValidTime	Time	Time when Bid Price expires
BidCancelTime	Time	Time When Bid Price as canceled
FMMN Maturity	Double	Absolute Final Maturity of FMMN
FMMN Pmt Freq	Text	Payment Frequency (Monthly,Quarterly,SemiAnnual,Annual)
FMMN Und Cusip	Text	Cusip of Underlying Collateral
FMMN Rating	Text	Credit Rating of Underlying Collateral
FMMN Coupon	Double	Coupon on FMMN
FMMN Amount	Double	Amount of FMMN to be Purchased
AskUserId	Time	Membership Id of Person Buying Final Maturity Mortgage Note
AskPrice	Double	Price Member is willing to pay for Final Maturity Mortgage Note
AskTime	Time	Time Price for Final Maturity Mortgage Note was entered
AskValidTime	Time	Time When AskPrice prices
AskCancelTime	Time	Time When Ask Price was canceled
AskInstId	Long Integer	Id of Final Maturity Mortgage Note

Figure 8D

Final Maturity Sample Layout

Field Name	Field Type
InstId	24111
BidPrice	TsyYld + 50 bp
BidUserId	67
BidTime	01/24/2000 12:01:04 CST
BidValidTime	01/24/2000 13:00:00 CST
BidCancelTime	NULL
FMMN Maturity	Jan 31 2007
FMMN Pmt Freq	SA
FMMN Und Cusip	FAA2001232X111
FMMN Rating	US Govt Agency
FMMN Coupon	7.15%
FMMN Amount	$35,000,000
AskUserId	22
AskPrice	TsyYld + 30 bp
AskTime	01/24/2000 12:01:04 CST
AskValidTime	01/24/2000 13:00:00 CST
AskCancelTime	NULL
AskInstId	24001

Figure 8E

Underwriter's Table Structure

Underwriter's Table

Field Name	Field Type	Description
AuctionId	Integer	Identifier for Auction
Start Time	Date	Start Time of Auction
End Time	Date	Scheduled End Time for Auction
Arb Profit	Double	Arb Profit as Percent

Figure 8F

Underwriter's Table Sample Layout

Field Name	Field Type
AuctionId	6510101
Start Time	Mar 1 2000 14:10:00 CST
End Time	Mar 1 2000 16:30:00 CST
Arb Profit	0.25%

Figure 8G

Instrument Structure Table

Instrument Structure Table

Field Name	Field Type	Description
Auction Id	Integer	Id Number for Auction
Class Id	Integer	Id number for this class
Min Size	Double	Minimum Size for this class
Increment	Double	Increment for this class
Max Size	Double	Maximum Size for this class
Type	Text	Class,Reference,Collateral
Price Source	Text	Source of Pricing for this class
Valuation Rule	Text	Function that determines value
Inst Type	Text	Instrument type
Rating	Text	Credit Rating of Instrument

Figure 8H

Instrument Structure Sample Layout

Field Name	Field Type	Description
Auction Id	Integer	651000
Class Id	Integer	1231
Min Size	Double	$4,000,000
Increment	Double	$1,000,000
Max Size	Double	$100,000,000
Type	Text	Class
Price Source	Text	NA
Valuation Rule	Text	FMM001
Inst Type	Text	FMM
Rating	Text	Agency

Figure 8I